



## Post-Audit Agreement

#### Sam Nixon

CIO of the Commonwealth

AITR Meeting June 8, 2011



#### Resolution of August 2010 Outage

# Agreement reached between CoVA and Northrop Grumman

- Two components of agreement
  - Financial restitution and operational improvements
  - Total value to CoVA is \$4.748 million





- Financial settlement
  - -\$1.91 million paid out over 24 months
- Operational improvements
  - Represents \$2.09 million in additional expense by Northrop Grumman
  - \$750,000 to implement "point in time" or "snap/clone" technology





- Deliverable: Corrective action plan
  - Addresses findings and recommendations from third-party audit report

Agreement does not diminish CoVA's rights under CIA

Certain actions already have been implemented





## Post-Audit Agreement

Mike Shaffer

Mainframe/Server SME, VITA

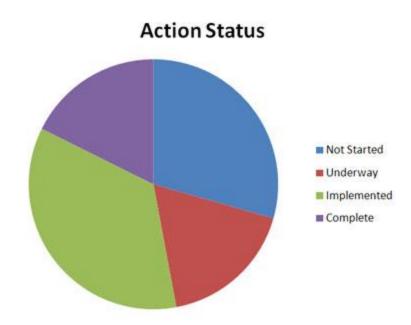
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#### Overview

- Addresses 34 findings and recommendations from the audit of the August 2010 SAN outage
- Focuses on reducing the likelihood of reoccurrence
- Actions and due dates assigned; they run through March 2012







### Summary of corrective actions

- Implement a system that significantly enhances data recovery capability, e.g. "snap and clone"
- Perform additional testing of core system failover and system restores
- Document IT infrastructure systems that support critical business processes
- Implement a network monitoring/reporting tool
- Improve proactive monitoring of databases
- Employ several process improvements (how the storage system is maintained, root cause analysis process, etc)





#### General themes

- Process and Procedures
  - Communications
  - Incident management
- Monitoring
  - Database
  - CMDB or dependency correlation
- Database support improvements
  - Synchronized backup processes
  - Standard back up processes
- Storage subsystem management improvements
  - Maintenance approach
  - SRDF start/stop
- Other
  - Facilities, network, etc.
  - New services snap and clone





## New services - Snap and clone

- EMC product allows the creation of point in time copies of data
- IT Partnership currently defining roll-out or engagement process for agencies
- Enables copy of data to be more current in the event of an incident
- Enables a 'snap' or copy of changed data
- Enables a 'clone' or one-to-one copy





## Questions?